

Applicant: Juhana Lumiala
Application No.: 10/009,038
Art Unit: 1731

Claim Listing

1-7. (cancelled)

8. (previously presented) A method for passing dilution water into connection with a stock flow passed from a stock inlet header of a headbox in a paper or board machine, wherein dilution is carried out in at least two stages using in a first dilution stage first valves fitted with a larger mutual spacing at different points of width across the headbox and passing the dilution water through said first valves to desired points of width of the headbox according to the requirement of control of the basis weight of paper or board, and wherein in a second dilution stage (II), dilution water is passed into connection with a stock flow coming from the first dilution stage, said dilution water being controlled by means of second valves, the second valves being fitted with a denser spacing than the first valves of the first dilution stage, and that coarse control of the basis weight profile of the stock is carried out in the first dilution stage and fine control of the basis weight profile of the stock is carried out in the second dilution stage across the width of the machine.

9. (previously presented) The method of claim 8 wherein the dilution water used in the second stage of dilution has a solids, filler or fibre content which is substantially lower in percentage terms than that of the dilution water of the first stage of dilution.

10. (previously presented) The method of claim 8 wherein the dilution water used in the second dilution stage is selected from the group consisting of raw water and clarified white water.

11. (previously presented) The method of claim 8 wherein the dilution water of the first stage is white water.

12-14. (canceled)

Applicant: Juhana Lumiala
Application No.: 10/009,038
Art Unit: 1731

15. (previously presented) A method for controlling the basis weight profile of a stock flow across the width of a papermaking machine headbox, comprising the steps of:
passing dilution water into the stock flow from a stock inlet header of the headbox, the dilution water being passed through a plurality of first valves spaced a first distance apart to points of width of the headbox to produce a first stage diluted stock flow in which coarse control of the basis weight profile of the stock is carried out; and
passing dilution water into the first stage diluted stock flow through a plurality of second valves, the second valves being spaced apart a second distance which is less than the first distance to produce a second stage diluted stock flow in which fine control of the basis weight profile of the stock is carried out across the width of the machine.
16. (previously presented) The method of claim 15 wherein the dilution water used in the second stage of dilution has a solids, filler or fibre content which is substantially lower in percentage terms than that of the dilution water of the first stage of dilution.
17. (previously presented) The method of claim 15 wherein the dilution water used in the second dilution stage is selected from the group consisting of raw water and clarified white water.
18. (previously presented) The method of claim 15 wherein the dilution water of the first stage is white water.